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URBAN LAND

NEWS AND TRENDS . . .

IN CITY DEVELOPMENT

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HOME BUILDERS FACE HIGHER SITE IMPROVEMENT STANDARDS

The complaint has been voiced for several decades that required land subdivision standards have been rising to the point where low and medium cost house developments are uneconomic. The truth of the matter is that in some few localities high municipal improvement standards may be oppressive and out of line. A larger truth, however, which must be faced is that the home buyer himself is insisting upon higher standards. Magazines and books for the lay public have been warning the buyers of homes what he should look for and what he should expect.

Furthermore, the FHA and the financial institutions, looking forward to investment stability and values, have insisted upon higher standards. The result has been that the public has become increasingly aware of the fact that not only the street in front of his house but the nearby school, playground, shopping center and traffic through-way are all important considerations in house buying. Even though it were easy it will not be wise at this time to lower standards.

The endeavor to satisfy an enlightened public demand for good street improvements is bound to create a highly competitive market which will in turn require the economies which careful site planning and development can bring.

The FHA, which has been a constructive force since the early 30's for better subdivision practices, has now issued requirements on minimum street improvements for residential developments in which properties are offered as security for FHA-insured mortgage loans.

These newly defined standards will be given detailed discussion at the annual convention of the National Association of Home Builders in Chicago this month. Because they indicate the present trend and are significant to all groups concerned with land use, they are reproduced here:

Minimum Street Improvement Requirements

"1. **Suitability of Improvements.** Street improvements shall be appropriate to the type of development and durable under the use and maintenance contemplated.

"2. **Maintenance.** Adequate provision for the satisfactory maintenance of all streets shall be made by dedication to, and acceptance for maintenance by local authorities having jurisdiction, or by other acceptable means.

"3. **Extent of Improvements.** The street improvements shall extend continuously from the existing improved street system to provide suitable vehicular and pedestrian access to each lot upon which a dwelling is built, to provide adequate connections to existing or future streets at the boundaries of the development and to provide convenient circulation for vehicles.

"4. **Right-of-Way and Pavement Widths.** The rights-of-way shall be of adequate width to accommodate the contemplated widths of pavement, sidewalks and planting strips. Pavements shall be of adequate widths to accommodate the contemplated parking and traffic load in accordance with the type of street.

"5. **Grading and Center Line Gradients.** The rights-of-way shall be graded for their full width to provide suitable finish grades for pavement, sidewalks and planting strips with adequate surface drainage and convenient access to the lots. The height and steepness of the slopes to the finished grade of the lots shall be such as to provide stability and reasonable freedom from erosion. Center line gradients shall be suitable to provide adequate surface drainage and reasonable safety for traffic.

"6. **Storm Sewer System.** An adequate storm sewer system consisting of catch-basins, and other underground drainage structures with approved outlets shall be constructed where the runoff of storm water and the prevention of erosion cannot be accomplished satisfactorily by surface drainage facilities. Outlets shall be approved by the owners of the properties affected and local authorities having jurisdiction.

"7. **Pavement Edging and Surface Drainage Channels.** Pavements other than cement concrete shall be protected at the edges by curbs, gutters or other suitable means to prevent ravelling of the wearing surface and shifting of the pavement base. Adequate surface drainage shall be provided by concrete or stone gutters or other drainage channels constructed of suitable materials and at suitable gradients to prevent erosion, to carry storm water to the storm sewer system or to other acceptable outlets and to permit convenient access to the lots.

"8. **Pavement Base.** The pavement base shall be constructed on a suitable subgrade and of highway materials which have proven satisfactory for the local climate and soil conditions. The base shall be properly drained and suitably constructed to support the contemplated traffic load.

"9. **Pavement Wearing Surface.** Pavements other than cement concrete shall be provided with a bituminous wearing surface that is impervious to water in order to protect the base and provide a pavement which is durable under the traffic load and maintenance contemplated. Bituminous surfacing, however, is at the discretion of the Chief Underwriter in cases of developments of country homes and in localities where bituminous materials are not generally used or are not obtainable.

"10. **Driveways.** Where appropriate because of custom or the type of development or where local regulations prohibit continuous street parking, a driveway from the pavement to the lot line shall be provided for vehicular access to each built-upon lot. Driveways shall be of adequate width and constructed with suitable subgrade, base, drainage

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Plan-itorials . . .

Raise Your Budget for Improvements

Pressures on the home builder today are unprecedented. He is expected to provide a tremendous volume of low cost and moderate cost housing of high standard at advanced construction costs. Uncertainty as to materials, labor and regulations is in itself a cost in time and money.

Added to these well known truths is the somewhat less generally appreciated fact that the required standards for site improvement are likewise definitely advanced and must be reflected in the price to the home buyer.

The ratio of the value of the improved lot to that of house and lot is steadily rising on properties under $8,000. On new properties in the past, this averaged around 12 per cent. Today a ratio of at least 15 per cent can be safely figured in most areas.

Builders must realize they are going to install much more complete street and utility improvements than was generally done before the war. The days of dirt or cinder streets, open ditches for drainage, and wells and septic tanks are largely a thing of the past. With very few exceptions, the city and county governments are requiring the developers to install black top streets, curbs and gutters, storm water and sanitary sewers and water mains at their own expense. The often justifiable contention that the local government should give more help to developments is countered by the usual realities (1) The communities have already strained their financial resources to the limit and (2) They consider installation of full improvements by the developer to be an efficacious check on a flood of unwarranted subdivisions.

To cut down maintenance costs, the construction standards on improvements are being continually raised. There is no question that the value of good street improvements accruing to a home property is much greater than the actual expense of installation. FHA and the lending institutions have proved this to their satisfaction and their influence is certainly sufficient to assure that the level of standards will be progressively higher.

The difficulty posed to the skilled builder and developer is not that he is reluctant to meet the standards. The problem is that he is called upon to meet them at a time when abnormal pressures are upon him for the production of low cost housing in a high cost building market.

The only "give" indicated in the builder's tight position must lie in the economies and ingenuity which competition induces and which skill in site planning and development can effect. S. H. M.

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Higher Site Standards

(Continued from Page One)

and surfacing to be durable under the use and maintenance contemplated.

"11. **Sidewalks.** Sidewalks shall be provided where necessary or appropriate for the safety and convenience of pedestrians. Sidewalks shall be of adequate width and of durable construction for the contemplated use and maintenance.

"12. **Street Trees.** The streets shall be provided with long-lived shade trees as necessary and appropriate for the comfort of the residents and the appeal of the development. Street trees shall be of species suitable for local soil and

(Continued on Page Four)

AVERAGE FRONT FOOT COST FOR IM

NORTHEASTERN STATES HEA

	Unit Cost	Front Foot Cost	nit Co
GRADING—Average 12" Cut	$ .75 cu. yd.	$ .38	66 cu.
PAVING—			
BASE—Sand Clay, Gravel or equal	.55 sq. yd.	.70	65 sq.
WEARING SURFACE—Double Surface Treatment	.40 sq. yd.	.51	42 sq.
CURB AND GUTTER—Cement Concrete, Rolled or Straight Faced	1.40 lin. ft.	1.40	30 lin
SIDEWALKS—Cement Concrete 4' x 4"	.25 sq. ft.	1.00	25 sq.
SANITARY SEWER—Minimum 8"	2.50 lin. ft.	1.25	25 lin
STORM SEWER [1]	3.00 lin. ft.	.50	00 lin
WATER [2]	2.25 lin. ft.	1.13	00 lin
PLANTING AND SEEDING—(6½ sq. ft. grass @ .03, one tree every 60' @ $6.00)		.29	
	Sub-Total	$7.16	
For street improvements on which no houses face 15%		1.07	
Engineering 6%		.49	
	Total	$8.72	

[1] Storm drainage based on a minimum 15 inch pipe being constructed under one-third total linear feet of streets.
[2] In many areas the city or county participates in the cost of some of these items. This would reflect in a local cost sheet.
[3] Front foot cost based on a 26-foot pavement width using a 2-foot over-all width for curb and gutter, with the curb riser being 6 inches wide.
[4] Six inch Macadam or equal.
[5] One and one-half inch Asphaltic Concrete.

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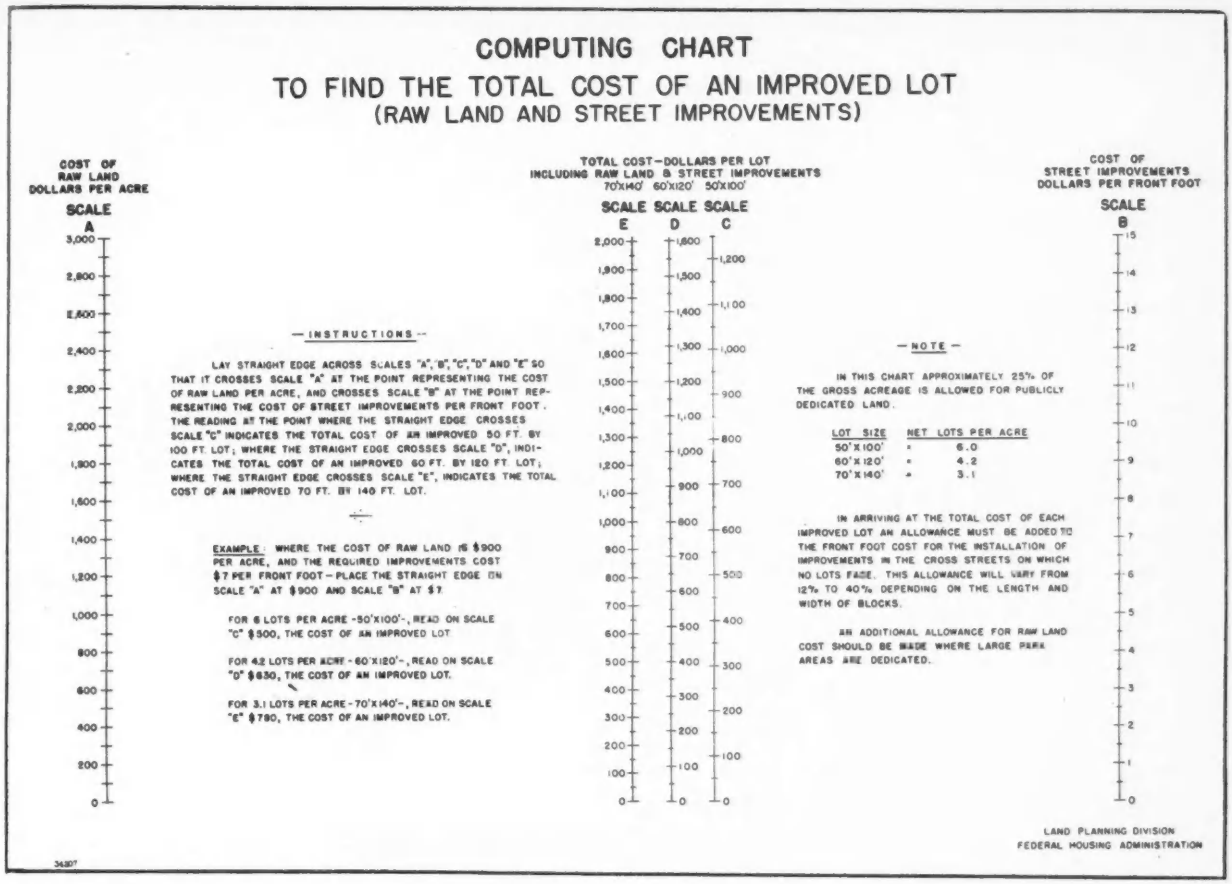

COMPUTING CHART
TO FIND THE TOTAL COST OF AN IMPROVED LOT
(RAW LAND AND STREET IMPROVEMENTS)
COST OF RAW LAND DOLLARS PER ACRE
SCALE A
TOTAL COST—DOLLARS PER LOT INCLUDING RAW LAND & STREET IMPROVEMENTS 70'X140' 60'X120' 50'X100'
SCALE E
SCALE D
SCALE C
COST OF STREET IMPROVEMENTS DOLLARS PER FRONT FOOT
SCALE B
—INSTRUCTIONS—
LAY STRAIGHT EDGE ACROSS SCALES "A", "B", "C", "D" AND "E" SO THAT IT CROSSES SCALE "A" AT THE POINT REPRESENTING THE COST OF RAW LAND PER ACRE, AND CROSSES SCALE "B" AT THE POINT REPRESENTING THE COST OF STREET IMPROVEMENTS PER FRONT FOOT. THE READING AT THE POINT WHERE THE STRAIGHT EDGE CROSSES SCALE "C" INDICATES THE TOTAL COST OF AN IMPROVED 50 FT. BY 100 FT. LOT; WHERE THE STRAIGHT EDGE CROSSES SCALE "D", INDICATES THE TOTAL COST OF AN IMPROVED 60 FT. BY 120 FT. LOT; WHERE THE STRAIGHT EDGE CROSSES SCALE "E", INDICATES THE TOTAL COST OF AN IMPROVED 70 FT. BY 140 FT. LOT.
EXAMPLE: WHERE THE COST OF RAW LAND IS $900 PER ACRE, AND THE REQUIRED IMPROVEMENTS COST $7 PER FRONT FOOT—PLACE THE STRAIGHT EDGE ON SCALE "A" AT $900 AND SCALE "B" AT $7.
FOR 6 LOTS PER ACRE - 50'X100'-, READ ON SCALE "C" $500, THE COST OF AN IMPROVED LOT
FOR 4.2 LOTS PER ACRE - 60'X120'-, READ ON SCALE "D" $630, THE COST OF AN IMPROVED LOT.
FOR 3.1 LOTS PER ACRE - 70'X140'-, READ ON SCALE "E" $790, THE COST OF AN IMPROVED LOT.
—NOTE—
IN THIS CHART APPROXIMATELY 25% OF THE GROSS ACREAGE IS ALLOWED FOR PUBLICLY DEDICATED LAND.
LOT SIZE NET LOTS PER ACRE
50'X100' = 6.0
60'X120' = 4.2
70'X140' = 3.1
IN ARRIVING AT THE TOTAL COST OF EACH IMPROVED LOT AN ALLOWANCE MUST BE ADDED TO THE FRONT FOOT COST FOR THE INSTALLATION OF IMPROVEMENTS IN THE CROSS STREETS ON WHICH NO LOTS FACE. THIS ALLOWANCE WILL VARY FROM 12% TO 40% DEPENDING ON THE LENGTH AND WIDTH OF BLOCKS.
AN ADDITIONAL ALLOWANCE FOR RAW LAND COST SHOULD BE MADE WHERE LARGE PARK AREAS ARE DEDICATED.
LAND PLANNING DIVISION
FEDERAL HOUSING ADMINISTRATION
24307

The developer is faced today not only with high standards but with permanently higher construction costs and in many instances inflated costs. To add to the difficulty is the present uncertainty in some localities as to what costs are or will be. Urban Land has obtained from FHA unit and front foot costs for various sections of the country based upon a January, 1946, average of many jobs. These are tabulated in the chart below. By using the computing chart above, with the cost of street improvements per front foot and the cost of raw land per acre known, the total cost for an improved lot can be easily found.

TOR IMPROVEMENTS IN SUBDIVISIONS

ATES	NORTHEASTERN STATES [7]		NORTH CENTRAL STATES [8]		SOUTHWESTERN STATES [9]		WEST COAST STATES [10]	
ront t Cost	Unit Cost	Front Foot Cost	Unit Cost	Front Foot Cost	Unit Cost	Front Foot Cost	Unit Cost	Front Foot Cost
.38	66 cu. yd.	$ .33	$ .65 cu. yd.	$ .33	$ .53 cu. yd.	$ .27	$ .60 cu. yd.	$ .30
.70	65 sq. yd.	.83	1.15 sq. yd.[4]	1.47	.55 sq. yd.	.70	.60 sq. yd.	.77
.51	42 sq. yd.	.54	.40 sq. yd.	.51	.44 sq. yd.	.56	.75 sq. yd.[5]	.96
1.40	30 lin. ft.	1.30	1.25 lin. ft.	1.25	1.10 lin. ft.	1.10	1.25 lin. ft.	1.25
1.00	25 sq. ft.	1.00	.25 sq. ft.	1.00	.23 sq. ft.	.92	.24 sq. ft.	.96
1.25	25 lin. ft.	1.13	2.00 lin. ft.	1.00	2.05 lin. ft.	1.03	2.00 lin. ft.	1.00
.50	00 lin. ft.	.50	2.60 lin. ft.	.43	2.85 lin. ft.	.48	2.25 lin. ft.	.38
1.13	00 lin. ft.	1.00	2.50 lin. ft.	1.25	1.75 lin. ft.	.88	2.00 lin. ft.	1.00
.29		.29		.29		.29		.29
		$6.92		$7.53		$6.23		$6.91
7.16		1.04		1.16		.94		1.04
1.07		.48		.56		.43		.48
.49		$8.44		$9.25		$7.60		$8.43
8.72								

eet. nnecticut, Delaware, Massachusetts, Maryland, New Jersey, New York, Pennsylvania and Rhode Island.
urb labama, Florida, Georgia, Kentucky, North Carolina, South Carolina, Tennessee and Virginia.
diana, Illinois and Ohio.
kansas, Colorado, Louisiana, Oklahoma, New Mexico Texas and Wyoming.
alifornia, Oregon and Washington.

Now in Print

The Art of Building Cities, by Camillo Sitte. Translated from the German by Lieut. Charles T. Stewart, U.S.N.R. Former Director, The Urban Land Institute. Reinhold Publishing Corporation, 330 West 42nd Street, New York, N. Y., $5.00.

Camillo Sitte's book on town building was published first in German in 1889 and later in French in 1908. The Urban Land Institute is proud of the fact that Charles T. Stewart, director of the Institute before entering the Navy in 1944, has done the valuable work of translating this book into English.

Camillo Sitte's writing was concerned with the *esthetics* of the city. He devotes most of his attention to plazas, public squares, courts, and monuments. Lieut. Stewart's translation is well illustrated with over one hundred thumb nail sketches and line drawings, from the original publication, of public places and squares.

The motive in writing the book was to find means of satisfying the three principal requirements of practical city building—as Sitte saw it—"to rid the modern system of blocks and regularly aligned houses; to save as much as possible of that which remains from ancient cities; and in creation to approach more closely the ideal of ancient models."

The first seven of the twelve chapters are devoted to the form, relationship and character of public squares and places. A following chapter describes the shortcomings of what was then "modern city planning." Sitte objected to modern churches and monuments standing only in the centers of sites. He objected to "chess-board" patterns, straight lines and right angles which lead to "banal" effects, streets that were too open and lack of enclosure. He objected to the hesitancy to design impressive large building approaches and the tendency to dreary uniform building heights, stark severity, endless rows of similar size windows, and an excess of "diminutive" pilasters. The basic trouble in city planning art, Sitte thought, lay in the standardized rectangular, radial or triangular systems of street layout.

Sitte's chapter on "Improved Modern Systems" is particularly interesting and in view of the work of todays planning commissions, his following statement is at least provocative: "A work of art can be created only by an individual. An artfully effective city plan is truly a work of art, and not a matter of administrative routine." Preliminary studies of population growth, needed circulation and types of buildings he says can be done by "official agencies" or "expert commissions." This distinction is consistent with Sitte's general approach to city planning. His was the approach of the esthete which contrasts with the more comprehensive approach of today.

To thoroughly appreciate Sitte the reader must relate the writing to the time and place in which he wrote and properly place it in the planning movement. Social revolution had touched Sitte's Vienna by 1889 relatively little if at all. His emphasis on form rather than function and emotional attachment to the old is understandable. But America had by then become aware of its shortcomings. Sanitation, housing and park systems were becoming the socialized conception of city planning while the Centennial Exhibition in Philadelphia in 1876 and the Chicago World's Fair of 1893 stimulated the side of civic art. It is a fair question, posed by Sitte a half century ago, if we haven't moved too far from purely esthetic considerations in city planning.

Sitte says, "Every technician engaged in site planning today (1889) has an obligation to give careful consideration to every factor, including the artistic factor, and it is to be hoped that the still customary block pattern as a plan for city development will be finally cast aside by its remaining sluggard adherents."

Higher Site Standards

(Continued from Page Two)

climatic conditions and adapted to street use. They shall be properly spaced and located, and planted so as to have continued growth under the contemplated maintenance.

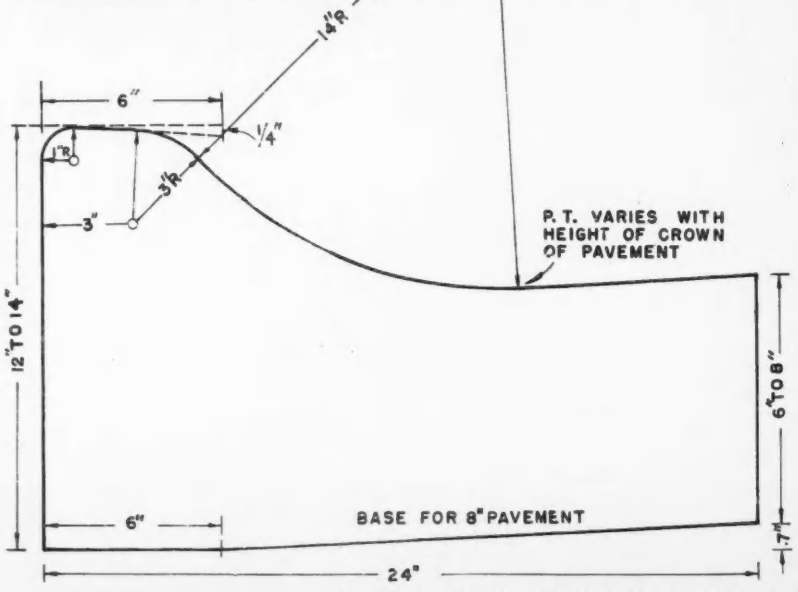
"13. **Planting Strips.** The unpaved areas in the rights-of-way shall be provided with a thick stand of permanent grass with suitable soil to support growth, or with other appropriate treatment to prevent erosion, to hold down dust, and to enhance the appearance and appeal of the development.

"14. **Street Name Signs.** Appropriate street signs of suitable material shall be installed as necessary for convenient identification of the streets."

FHA will later issue data sheets on how these standards can be met.

ROLLED CURB AND GUTTER

The combined curb and gutter, poured in one unit is designed to permit location of driveways at any point without breaking the curb. Usual hung forms are eliminated. The work is shaped and finished in one operation by a template resting on front and back forms.



From Federal Housing Administration Land Planning Division—Data Sheet L3, "Street Improvements"